

late in the season for them, as my friend Browning took them as early as the latter part of April, and in numbers the middle of May. They were found on the salt flats from Saltair to within three or four miles of the city.

Under pieces of lumber and other drift-wood along the beach were found numbers of *Bembidum henshawi*, Haywd. *approximatum* Lec., and *ephippiger* Lec. A single specimen each of *Tachys corax* Lec., *Pogonus planatus* Horn and *Amara* sp. were found. *Agabus disintegratus* Cr. had been washed ashore by the waves of the lake. A species of *Philonthus* was taken on the lake shore. Under drift on the beach, and near the edge of salt pools were found *Dermestes marmoratus* Say and *talpinus* Mann. Three species of *Hister* were taken under drift: *Saprinus lubricus* Lec., *contractus* Csy. and *striatus* Lec. A few specimens of *Aphodius inquinatus* Hbst. were picked up here and a single specimen of the Tenebrionid genus, *Blapstinus* was taken. *Tanarthus salicola* Lec. was rather common under drift.

On my return a few hours stop at Cheyenne, Wyo., permitted me to collect a short time north of the city limits, but with poor return. *Trichodes ornatus* Say was found on thistles, and *Canthon praticola* Lec. and *Aphodius coloradensis* Horn occurred under cow-chips. *Acmaeops pratensis* Laich was found on sunflowers; *Bruchus pauperculus* Lec. was common on thistle flowers.

The Greenhouse Coccidae, II.

By GEORGE B. KING, Lawrence, Mass.

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DIASPINÆ.

34. *Aspidiotus spinosus* Comst. 1883.

This is found only in greenhouses in the United States. Its native home is unknown, and has only been found in greenhouses thus far.

33. *Aspidiotus lataniæ* Sign. 1869.

Syn. *A. greenii* Ckll. *A. cydoniæ* Green. Has been found on *Cycas revoluta* at Savannah, Ga. (W. M. Scott), in New York

on palms in greenhouses, and on palm (*Howea belmoreana*) at Lawrence, Kansas (S. J. Hunter); on ivy (*Hedera*) at Lawrence, Mass. (King). It is a greenhouse species in Europe (Signoret). Introduced.

34. **Aspidiotus hederæ** Vall. 1829.

Usually cited as *A. nerii*, is found on Oleander and Dracæna in the College Greenhouse in Colorado (Baker); a greenhouse pest in New Mexico (Cockerell); on lace fern, *Asparagus plumosus*, and *Hedera* in the University greenhouse at Ithaca, N. Y.; on *Hedera* and China tree in Ohio; on *Cycas revoluta*, *Jasminum grandiflorum* and orange in Georgia (W. M. Scott); on *Asparagus plumosus* in the University greenhouse in Illinois (W. G. Johnson); on a palm in a dwelling house at London, Ont., Canada (King); on *Oleander* at Westbrook and *Hedera hibernica* at Portland, Maine (O. O. Stover). It is a common European species and found out of doors in California and Georgia.

35. **Aspidiotus hederæ** var. **ericæ** Boisd.

Found in a greenhouse at Lawrence, Mass., on *heather* (*Erica*) King. A European species (Signoret). Introduced.

36. **Aspidiotus myrsinæ** Sign.

A species allied to *hederæ* found on *Myrsina retusa* in the hot-house of the Luxembourg, Paris (Signoret). Introduced.

37. **Aspidiotus rapax** Comst. 1881.

In Colorado on Japan quince, *Aralia* and *Ficus elastica* (Baker); on house plants in New Mexico (Cockerell); in College greenhouse at Amherst, Mass., and is found on *Camellia* in greenhouses in France. Introduced.

38. **Aspidiotus cyanophylli** Sign. 1860.

In the Harvard botanical greenhouse at Cambridge, Mass. (King); in greenhouses at Lawrence, Mass. (King); on *Ficus* species (Comstock); on *Cyanophyllum* and *Cycas* in Ceylon (E. E. Green) and in greenhouses in France (Signoret). Introduced.

39. **Aspidiotus personatus** Comst. 1882.

Has been found on plants under glass at the Kew Botanical Gardens, England.

40. **Aspidiotus aurantii** Mask. 1878.

Found on an orange in a greenhouse at San Francisco, Cal. Introduced.

41. **Aspidiotus aurantii** var. *citrinus* Coquill.

On olive in the conservatory of the U. S. department of Agr. at Washington, D. C. (Marlatt). Introduced.

42. **Aspidiotus buddeiae** Sign.

This was found on *Buddleia salicina* in a greenhouse of the Luxembourg, Paris (Signoret).

43. **Chrysomphalus aonidum** L. Syn. *Aspidiotus ficus* Ashm.

Originally described as *Coccus aonidum*; is found at Santa Fe, New Mexico (Cockerell); at Corvallis, Oregon (A. B. Cordley); on *Phormium tenax* in Colorado (Gillette); in greenhouses in Florida; on palms at Gloversville, N. Y. (G. W. Pool); on palms, *Cycas revoluta* and ferns in Georgia (W. M. Scott); in the department greenhouses, Washington, D. C., on *Allamanda*; at Bangor, Maine (O. O. Stover). A common species in greenhouses in Mass. (King), and a frequently found species in Europe in greenhouses. Introduced.

44. **Chrysomphalus dictyospermi** Morg. 1889.

Described as an *Aspidiotus*; is found at Santa Fe, New Mexico, on *Pandanus* (Cockerell); on *Chamærops elegans* in greenhouses in Colorado (Baker); on *Arceia lutescens* at Columbus, Ohio (J. S. Hine). I have received it on *Cinnamon* from a greenhouse at Ottawa, Canada, Coll. Fletcher, and from Dr. Dimmock, found on *Ficus elastica* at Enfield, Conn. It is found in Trinidad on *Arceia catechu* (Hart). Introduced.

45. **Disapis cacti** var. *calyptroides* Casta.

Was first described from a greenhouse and found on Cactus in Georgia (W. M. Scott); in the college greenhouse at Amherst, Mass. on *Cactus* (D. H. Hemenway). It lives out of doors on wild *Cactaceæ* at Tucson, Arizona. It is recorded from pineapple in Georgia. This seems to be an error; it must have been an *Aulacaspis* species, *bromeliæ* or *boissduvalii* [Ckll. in litt.].

46. **Aulacaspis elegans** Leon 1899.

Very destructive to *Cycas revoluta* in greenhouses at Springfield, Mass. (Dimmock), on *Cycas revoluta* in the Harvard Botanical greenhouse at Cambridge, and at Lawrence, Mass. (King). Originally described from Portici, Italy, on *Cycas revoluta*. Introduced.

47. **Aulacaspis bromeliæ** Kerner 1778.

On pineapple at San Jose, Cal., E. M. Ehrhorn, and received from O. O. Stover on *Latania borbonica* and *Livistona chinensis* at Portland, Maine; on *Acacia*, *Olea fragrans*, *Gnidia?* *simplex* and ivy at Plum Island and Amherst, Mass.; in the Botanical greenhouse at Cambridge, Mass. Introduced.

48. **Aulacaspis boisduvalii** Sign. 1869.

On palm in Colorado (Gillette); also on palms in greenhouse, Lawrence, Mass. (King). It is recorded as being found out of doors on apple and peach, but this seems very unlikely, as it is a tropical species. Introduced.

49. **Parlatoria proteus** var. **pergandei** Comst. 1880.

In a miscellaneous lot of scale insects sent to me by Prof. Cockerell for study, one on *Ficus* Sp., collected by P. J. Parrott, at Manhattan, Kansas, proved to be the above species. Introduced.

50. **Parlatoria proteus** var. **crotinis** Douglas 1887.

Was found on *Croton* under glass at Columbus, Ohio. Coll. Bogue (Cockerell). Introduced.

51. **Mytilaspis gloverii** Pack. 1860.

On orange and lemon in a greenhouse in New York; on orange at Marshallville, Georgia; also on *Magnolia fuscata* (W. M. Scott). A very common species on orange and lemon out of doors. Nativity uncertain, probably introduced.

52. **Mytilaspis beckii** E. Newman, 1869.

Described as *Coccus beckii* Syn. *M. citricola* Pack. Found on dwarf orange at Thomasville, Georgia; on *Citrus* sp. in a greenhouse at Manhattan, Kansas, Coll. P. J. Parrott, 1898. Very common out of doors on orange and lemon; also found in a greenhouse near Moscow, Russia, on lemon. Introduced.

53. *Pinnaspis pandani* Comst. 1881.

Found in Mass. under glass (Cockerell). Originally described under the name *Mytilaspis*. Introduced.

54. *Hemichionaspis aspidistræ* Sign. 1869.

Described as a *Chionaspis*; was found on fern in the department greenhouse of Washington, D. C. (Cooley): on fern (*Pteris serrulata*) received from Dr. Fletcher; in a greenhouse at Ottawa, Canada, 1900, also received on *Cycas* sp. from Orono, Maine, Coll. O. O. Stover, and found on fern (*Davallia moorei*) in the Harvard botanical greenhouse, Cambridge, Mass. (King). It is also a common greenhouse pest in Europe (E. E. Green) and lives out of doors on several food plants. Cited by Signoret. Introduced.

55. *Ischnaspis longirostris* Sign. 1882, *filiformis* Dougl.

On palm in department greenhouse at Washington, D. C. (Howard); on palms, *Cycas* and *Aroids* in Trinidad, and *Strychnos myristica* and other plants in the Royal Botanical Garden greenhouse, London, England. It is very common on cultivated plants in the West Indies and in Australia, on palms in greenhouses (Maskell), also found at Atlanta, Georgia, on a palm, *Kentia belmoriana* (W. M. Scott), and in a greenhouse at Boston, Mass., on *Monstera* sp. Coll. S. Henshaw. Introduced.

56. *Fiorinia fioriniæ* Targ. 1869.

This is recorded under several names, e.g., *F. camelliæ*, *Uhleria camelliæ*, *Diaspis fioriniæ*, *Fiorinia pellucida* and *Chermes arecæ*. It has been found at Washington, D. C., on *Camellia*, *Cycas revoluta* and palm *Kentia belmoriana* (Comst.); on *Camellia* at Baltimore, Maryland; on *Camellia japonica* and *Cycas revoluta* in Georgia (W. M. Scott); on *Kentia belmoriana* in conservatories at Kew, England (C. F. Morgan) and in greenhouses in France (Signoret). It is found out of doors in Europe and America.

(To be continued.)

Ornecodes hexadactyla.—This species occurs also at Moscow, Idaho, where I have taken three specimens in nine years. A fourth was seen on the outside of a window, with its wings spread so as to display the peculiar structure; but when I came around to the place it had disappeared.—J. M. Aldrich.